

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. – 52. (Cancelled)

53. (New) A method of treating one or more lesions in a vessel, the vessel having a main branch and a side branch branching from the main branch at a bifurcation, the method comprising:

positioning a delivery catheter in the main branch, the delivery catheter having an expandable member disposed thereon and first and second stents unconnected with one another and positionable over the expandable member in direct engagement with one another when unexpanded;

radially expanding the expandable member thereby radially expanding the first stent in the main branch;

positioning the delivery catheter in the side branch; and

radially expanding the expandable member thereby radially expanding the second stent in the side branch;

wherein the delivery catheter remains in the vessel between radially expanding the first and second stents.

54. (New) A method as in claim 53 further comprising deploying a third stent from the delivery catheter in the main branch or side branch without removing the delivery catheter from the vessel.

55. (New) A method as in claim 53 wherein the delivery catheter is positioned through an opening in a sidewall of the first stent to deploy the second stent.

56. (New) A method as in claim 53 wherein the first and second stents each comprise a plurality of separable segments.

57. (New) A method as in claim 53 wherein the first stent has a different length than the second stent.

58. (New) A method as in claim 53 wherein the first stent is deployed before the second stent.

59. (New) A method as in claim 53 wherein the second stent is deployed before the first stent.

60. (New) A method as in claim 53 wherein the first stent and the second stent each have a portion in the main branch.

61. (New) A method as in claim 53 further comprising adjusting the length of the first stent before deploying the first stent while the delivery catheter remains in the vessel.

62. (New) A method as in claim 53 further comprising adjusting the length of the second stent before deploying the second stent while the delivery catheter remains in the vessel.

63. (New) A method as in claim 53 further comprising dilating at least one lesion in the vessel using an expandable member on the delivery catheter without a stent disposed thereon before deploying at least one of the first and second stents.

64. (New) A method of treating one or more lesions in a vessel, the vessel having a first branch and a second branch meeting at a bifurcation, the method comprising:
positioning a delivery catheter in the first branch, the delivery catheter having an expandable member disposed thereon and first and second stents unconnected with one another and positionable over the expandable member in direct engagement with one another when unexpanded;

radially expanding the expandable member thereby radially expanding the first stent in the first branch, a portion of the first stent being disposed across the bifurcation; positioning the delivery catheter in the second branch through an opening in a sidewall of the first stent; and

radially expanding the expandable member thereby radially expanding the second stent, at least a portion of the second stent being disposed in the second branch;

wherein the delivery catheter remains in the vessel between radially expanding the first and second stents.

65. (New) The method of claim 64 further comprising dilating the opening in the sidewall of the first stent by expanding an expandable member on the delivery catheter.

66. (New) The method of claim 65 wherein before dilating, the opening in the sidewall of the first stent is I-shaped.

67. (New) The method of claim 64 wherein the first stent has a first portion with a plurality of first slots and a second portion with a plurality of second slots, the first slots being larger than the second slots.

68. (New) The method of claim 67 wherein the opening in the sidewall of the first stent comprises one of the first slots, and wherein the first stent is deployed so that at least one of the first slots is aligned with bifurcation.

69. (New) The method of claim 64 wherein the first stent has a different geometry than the second stent.

70. (New) The method of claim 64 wherein the first stent has a different length than the second stent.

71. (New) The method of claim 64 wherein at least one of the first and second stents comprises a plurality of separable segments.

72. (New) The method of claim 64 further comprising dilating at least one lesion in the vessel using an expandable member on the delivery catheter without a stent disposed thereon before deploying at least one of the first and second stents.

73. (New) A method as in claim 56, further comprising:
selecting a first number of the separable segments for radial expansion, the first number of segments having a first length that substantially traverses a first lesion in the main branch; and
selecting a second number of the separable segments for radial expansion, the second number of segments having a second length that substantially traverses a second lesion in the side branch,

wherein the first number of segments is different than the second number.

74. (New) A method as in claim 73, wherein the step of selecting either the first number or the second number of segments comprises moving a sheath disposed at least partially over the delivery catheter.

75. (New) A method as in claim 73, wherein the step of selecting either the first number or the second number of segments comprises moving a pusher tube disposed at least partially over the delivery catheter.

76. (New) A method as in claim 71, further comprising:
selecting a first number of the separable segments for radial expansion, the first number of segments having a first length that substantially traverses a first lesion in either the first branch or the second branch; and
selecting a second number of the separable segments for radial expansion, the second number of segments having a second length that substantially traverses a second lesion in the other branch,

wherein the first number of segments is different than the second number.

77. (New) A method as in claim 76, wherein the step of selecting either the first number or the second number of segments comprises moving a sheath disposed at least partially over the delivery catheter.

78. (New) A method as in claim 76, wherein the step of selecting either the first number or the second number of segments comprises moving a pusher tube disposed at least partially over the delivery catheter.